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ABSTRACT

The Functional Academic Skills Tests (FAST) was developed to measure the basic skills of mathematics, reading, and writing in teachers employed by the Houston, Texas, Independent School District. The three content domains were drawn from the Pre-Professional Skills Tests (PPST). These sets of skills, or proficiencies, were amplified by supporting behavioral objectives, which determined specific test content. Item specifications consisting of content limits, distractor limits, and format statements stipulated how the items were to be written. A variety of trained personnel participated in writing and reviewing the items. The item pool was field-tested and equated with items on the PPST. Both tests were administered to 400 people. Based on the item statistics obtained, 80 percent of the tested items were available for the first test administration. In addition, cutting scores were developed which were equated with PPST passing scores. The Rasch model was used to construct the FAST forms and to build the item bank. FAST results are sent to the examinee. Employee remediation programs are available both before and after testing. (Appendices include a sample score report and detailed item specifications for mathematics, reading, and writing proficiencies; supporting objectives; and content limits.) (GDC)

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Development and Administration of an Employee Competence Test

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Chicago, Illinois, March 31, 1985

Development and Administration
of an Employee Competence Test

Overview

During the late 1970s and early 1980s, a national lack of confidence began to develop about the quality of teachers and teacher training programs. In response to these concerns, the Houston Independent School District, which serves 200,000 students and employs over 10,000 teachers, implemented the "Teacher Quality Assurance Program." This assessment program is required for all professional employees and is conducted by means of observations, interviews and a basic skills test. Future plans include a subject area examination.

The focus of this paper will be on the developmental effort of the district's assessment department for the basic skills test, called the Functional Academic Skills Tests or FAST. This testing program has been developed with a point of view that Nash and Ducharme (1983) have stated well:

> "It is not unreasonable that the public be assured that candidates for teaching positions possess basic skills in reading, language, and mathematics. Whether teachers in general suffer from so fundamental a lack of basic skills is questionable, and it may be more probable that the problems of a few individuals are being used to characterize the profession as a whole."

Organization of Staff

Following the decision of the board of education to implement the basic skills testing aspect of the assessment program, the assessment department had to produce a test within relatively tight timelines. The FAST development team, hired in June 1983, had a deadline of September 1, 1983, for the production of over 300 items for field testing. The team was composed of a project director, four test coordinators (one each in math

and writing and two in reading), and eight item writers. The reading test required two coordinators because the reading passages and the higher level interpretive items demanded a great deal of editorial time. All four of the test coordinators had academic and job experience in test construction and editorial review.

The eight writers were hired through local universities. The writing and reading teams were graduate students in English and creative writing. The math writers were former teachers and graduate students in the technical fields.

Test Specifications

The three content domains of the Functional Academic Skills Tests--mathematics, reading and writing--were defined as sets of skills called "proficiencies." The proficiencies were developed by teachers and curriculum and assessment department staff. These personnel defined the content domains by drawing from the district's content validation study of the Pre-Professional Skills Tests, developed by the Educational Testing Service, as well as from their own professional experience. The proficiencies were amplified by means of "supporting objectives"--descriptions of specific applications of the skills that require a demonstration of an employee's proficiency. The supporting objectives determined specific test content. Item specifications consisting of content limits, distractor limits, and format statements stipulated how the items were to be written. The FAST item specifications including the proficiencies and supporting objectives are attached as an addendum to this paper.

The FAST has liberal time limits to allow the examinee ample time to complete the test. The mathematics test measures six proficiencies that are delineated by 63 supporting objectives. The test has 40 items and examinees are given 1 1/2 hours to complete them. The reading test measures five proficiencies using 18 supporting objectives. The reading passages are systematically grouped to provide a specified variety in length, difficulty, and content. The passages are accompanied by 31 multiple choice items for which examinees are allotted 1 1/4 hours.

The writing test evaluates three proficiencies that are delineated by 45 supporting objectives. The test addresses the ability to recognize grammatical errors, to recognize an effective written expression, and to write an essay on a specified topic that draws upon the personal and professional experience of the examinees. The first two proficiencies are assessed by 45 multiple choice items, and the third proficiency is measured by a writing sample that is holistically scored. Examinees are given a time block of 1 3/4 hours that they may apportion as they choose between the objective and essay parts of the writing test.

Item Development and Review

The test writers used the supporting objectives and item specifications to develop the large number of test items necessary to support the first two years of testing. After the items were written, they were reviewed by the other team writers and the test coordinator. The review answered such questions as:

(1) Does the item match the objective?

(2) Is there a clearly correct answer?

(3) Are the distractors logical and consistent with the item stem?

(4) Is the item written in correct grammar?

(5) Is it a "trick" item?

(6) Does the item require previous knowledge?

(7) Is the item biased against any particular group?

The reading review also included an analysis of the following:

(1) Is the passage interesting to read?

(2) Can the items be answered without reading the passage?

(3) Are the distractors based on information given in the passage?

(4) Does the passage provide sufficient information to answer the higher level interpretive questions?

(5) Does the passage meet all the requirements concerning length, number of items per passage, and appropriate subject matter?

Once the items had been reviewed extensively within each of the teams, they were given to the test coordinators of the other two teams for further editing. The editorial questions listed above were responded to by the other coordinators, and the items were sent back to the writers for revision or for deletion from the bank.

At this stage in the development process, the items were given two additional content reviews by the district's curriculum department and by local university professors. These reviewers were especially concerned with the match of the item to the intent of the objective. The items and reading passages were also read by a bias reviewer to ensure that any content bias would be detected and deleted.

The item bank is maintained on a word processor so that changes in the text could be easily made. The disks on which the items are stored are kept under tight security.

Field Testing

Once the item pool was developed, the items were field-tested and equated with the items on the Pre-Professional Skills Test (PPST). Four hundred examinees took the FAST and PPST on two consecutive Saturdays. Four forms of the FAST were administered with a 25% item linkage among them. Eight essay topics were piloted in order to provide a sufficient number to support the first two years of testing.

Based on the item statistics obtained, 80% of all items field tested were available for use on the first certified administration of the test in November 1983. In addition, results of the field test were used to develop passing scores that were equated with previously established passing scores on the PPST.

Forms Construction

The Rasch model is used to construct the forms of the FAST. The November 1983 test is the anchor to which the ten succeeding tests have been calibrated. The item pool has grown through a continuous field-testing process. On each administration, 36 items in reading, 68 in writing and 40 in math are field-tested across the four forms of each of the subtests. Each pilot item is responded to by 400 to 500 examinees. Those items that meet the characteristics of the model and that have good item statistics are entered into the item bank for use in future tests.

The construction of the FAST requires separate sampling schemes for each of the three content areas. These sampling schemes were derived from

content validation studies that calculated a criticality rating for each supporting objective. The criticality rating expresses the approximate percent of an educator's duties that require knowledge of the supporting objective; therefore, the most critical supporting objectives are represented by the greatest number of items. Because of the large number of supporting objectives in writing and mathematics, not all objectives can be sampled on every form of the FAST; however, each proficiency is sufficiently measured in order to provide to the employee a valid score and diagnostic report.

The construction of the reading test is complicated by the requirements of the passages. Each test form must be composed of short passages (1 to 2 items), medium passages (3-4 items), and long passages (5-6 items). Twenty-five to forty percent of the passages must be of relevance to the field of education. Each test form must contain at least one passage of interest to minorities or women, and each must have at least one passage of scientific or technical interest.

The final phases of forms construction include arranging the items on the pages so that they are easily readable, vary in content, and vary in the position of the answer choices. Extensive proofreading is carried out to ensure that the items have been correctly transferred from the item bank and that they are free of typographical or other error. Answer keys are made and the tests are printed and collated.

Registration to Take the Test

The FAST is given five Saturdays during the school year and on two occasions on weekdays during the summer. Approximately 1800 examinees are tested at each session. Registration is conducted through the school mail

system. Packets of application forms are sent to each school and administrative department six weeks before the test date. Employees return the forms by mail and are then placed on a first-come, first-served basis in a testing room. An examinee may take one, two or three subtests and is placed in a testing room with others taking the same tests. The employee may take the test as many times as is necessary.

Registration information is managed with a microcomputer. Approximately two weeks before the test date, examinees are sent a confimation letter which is to be used as their entry into the test site. The letter specifies a location, room number and time for admission to the test.

Administration of the Test

Because Houston is so large, three secondary schools located throughout the city are used as sites for the testing. Examinees are tested in classroom groups of 25 to 30.

Approximately 75 people are required to administer and proctor the tests. The only district personnel allowed to administer are those assigned to the FAST project and other assessment department personnel. Also excluded from test administration are persons with the intention of applying for a position with the district. Most of the test administrators are faculty and graduate students from local universities in fields other than education.

Intensive training is provided for first-time test administrators and proctors. The test manual is read and discussed in detail and all measures

for maintaining test security are stressed. Preparation of materials for scoring and maintenance of accurate materials control forms are also emphasized.

Experienced test administrators have review sessions prior to each test date. Materials are checked and then returned to storage vaults until the day of testing. Discussion of any irregularities noted at previous testing sessions is provided at this time.

Score Reports

Score reports are mailed to examinees four to six weeks after the test date. These score reports (an example is included as an addendum) present the examinee's score for each of the three tests, the school district's cutoff scores for the tests, and a pass/fail indicator for each test. The report then presents a "Proficiency Profile" that more specifically describes an examinee's performance. This profile identifies and summarizes each of the proficiencies in the content areas and reports the percent correct of the particular items that address each proficiency. The proficiency profile enables an examinee to determine specific strengths and weaknesses.

Score reports are submitted to the district at the request of the examinee. These reports are maintained by the Proficiency Certification Department, the only department in the school district that has access to the passing status of the employee. Actual scores are reported to the examinee, but not to the district.

Remediation Courses

The school district sponsors employee remediation programs that are available before and after the test is taken. The Houston Community

College (HCC) offers four semesters a year of six-week classes in mathematics, reading and writing. These classes are open to district employees at no charge for the first enrollment. These classes are offered on both weekly and weekend schedules at six different HCC campuses.

The district's Department of Technology has developed microcomputer software for individualized instruction in each of the three content areas. The program diskettes are checked out to employees for use on personal computers.

A study guide also is available to all employees. The study guide combines explanation and exercises with textbook references for each supporting objective tested by the FAST.

Summary

The Houston Independent School District's efforts to test teachers in basic skills is part of an overall program of quality assurance in the district. However, as is said so well by Hathaway (1980),

> "Testing teachers for basic skills competence is not the whole answer, but as part of a comprehensive program to apply what careful evaluation and research have already taught us, it will lead to better schooling. Testing can be part of the solution."

EA/G-1-3/ajb

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Hathaway, Walter E., "Testing teachers," Educational Leadership, December 1980.

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APPENDIX A

MATHEMATICS TEST

Item Specifications

Proficiency 11

Given a set of no more than three rational numbers, the employee will compare the numbers, identify alternative forms of the numbers, specify the magnitude of one power of 10 relative to another, and estimate the result of a computation with the numbers.

Supporting Objectives

The employee will

11.01 locate numbers on a number line.
11.02 identify conditions under which numbers or measures may be compared.
11.03 use the relations less than, greater than, or equal to, and their associated symbols to express a numerical relationship.
11.04 identify numbers that are mathematically equivalent.
11.05 compare any two rational numbers.
11.06 determine the place values of digits in whole numbers (to billions).
11.07 give the result of multiplying or dividing a number by a multiple of 10.
11.08 select the appropriate decimal form of the powers of 10.
11.09 compare two powers of 10 and indicate which is larger (smaller) and by what factor.
11.10 investigate the properties of the four basic operations on rational numbers.
11.11 round a number to a specified value.
11.12 select the best estimate of a computation from a set of five estimates.
11.13 select the correct value, within a given range, of a number missing from a computation.
11.14 determine the correct sequence or order of numbers expressed as fractions, decimals, and/or percents.
11.15 convert numbers from one naming system to their equivalents in another naming system.

Content Limits

1. All fractions, when used in computation, will have numerators and denominators that are whole numbers less than or equal to 10.
2. All whole numbers will be less than 1000.
3. All exponents will be whole numbers less than 10.
4. All numbers used in the answer choices for estimation problems will be whole numbers.
5. The decimal portions of numbers will be three significant digits or fewer.
6. Only the symbols $<$ or $>$ or $=$ will be used to compare two numbers.
7. Alternate forms of whole numbers will be in standard form, expanded notation form, or word form.
8. Alternate form problems not involving whole numbers will be limited to equivalent fractions, equivalent decimals, or fraction/decimal/percent equivalents.
9. All numbers will be positive except those in number line problems, which may contain negative numbers.

Proficiency 12

Given a practical problem, the employee will choose a correct numerical equation to solve the problem, identify necessary and sufficient conditions to solve the problem, identify alternative methods of solution, solve the problem, express the answer in an appropriate form, and calculate simple probability.

Supporting Objectives

The employee will

12.01 read a stated problem and identify a correct restatement of it.
12.02 identify the facts given in a problem.
12.03 identify the problem command or question.
12.04 identify the correct statement of the relationship between given facts and missing data
12.05 determine whether or not extraneous facts are given.
12.06 determine whether or not enough information is given to solve a problem.
12.07 translate expressions and/or relationships into symbols.
12.08 identify equivalent relationships.
12.09 identify equivalent algorithms.
12.10 solve a simple equation with one unknown.
12.11 determine measures needed to solve a problem.
12.12 identify operations needed to obtain measures to solve a problem.
12.13 determine whether or not an answer to a computation generated by a stated problem agrees with the context of the problem.
12.14 identify the use of simple probabilities in daily situations.
12.15 express the probability of a simple event.

Content Limits

1. All numbers in the problems will be positive.
2. All whole numbers will be less than 5000.
3. All fractions will have numerators and denominators that are whole numbers less than or equal to 10.
4. The decimal portions of numbers will be three significant digits or fewer.
5. All answers will be written in word or numerical form.
6. Probability problems will contain no more than 10 possibilities.

Proficiency 13

Given (a) a set of data, (b) a word description of a relationship, an equation or a formula, (c) a stated problem involving ratio, proportion or percent, or (d) a geometric configuration, the employee will make appropriate predictions and extrapolations from the data, choose an equation or formula to specify a relationship, solve the problem, or identify a relationship among the points in a geometric configuration.

Supporting Objectives

The employee will

13.01 give a verbal description of the direct or inverse relationship between two sets of data in a table.
13.02 identify or specify a missing entry from a table of data.

13.03 choose a formula or equation that describes the relationship among data or that meets the condition specified in a word description of a relationship among quantities.
13.04 solve stated problems in which quantities are in proportion.
13.05 solve stated percent problems either by the equation method or the ratio/proportion method.
13.06 name common geometric figures.
13.07 determine when a set of points is collinear.
13.08 determine when lines are parallel or perpendicular

Content Limits

1. All data given in direct or inverse variation problems requiring computation will be in whole numbers.
2. Fractions used in tables for problems requiring computation will be decimal fractions with one or two decimal places.
3. Equations will be limited to one variable (N), four terms or fewer, and whole number coefficients.
4. Formulas will have no more than four variables.
5. At least one stated problem will require selection of the correct procedure to solve the problem and not require computation of the proportion.
6. Relationships among points in a geometric configuration will be limited to collinear, parallel, or perpendicular relationships.

Proficiency 14

Given a geometric configuration, a word problem or a situation involving measurement in standard or nonstandard units, or a calibrated scale, the employee will choose an appropriate unit for a specified attribute, solve the measurement problem, and read the scale.

Supporting Objectives

The employee will

14.01 investigate properties of length, area, and volume and determine which of these measurements is unchanged by such distortions as partitioning and rearranging parts, folding, or other manipulations.
14.02 name standard units of length, area, volume, temperature, mass/weight, and capacity in both customary and standard international (metric) systems.
14.03 choose the appropriate unit with which to measure an attribute.
14.04 state the relationship among units in both customary and standard international (metric) systems.
14.05 convert from one unit of measure to another using standard units and nonstandard conditional units.
14.06 find a measurement (area/volume) by definition as well as by formula.
14.07 solve problems involving measurement.
14.08 read a calibrated scale at and between calibrations.

Content Limits

1. All measures of length, area, or volume will be whole numbers.
2. Problems requiring rearrangement will involve only straight lines.
3. Conversion from one measuring system to another will not require mathematical calculation

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4. Problems that require choosing an appropriate unit of measurement will have problem components (and answers) from only one system of measurement (customary or standard international).
5. Reading points on a scale will be restricted to estimates using points given or to no less than one-fourth of the distance between the scale points given.
6. Problems involving calculation or estimation of area or volume will be restricted to simple or complex straight line shapes.

Proficiency 15

Given a set of no more than three conditional statements about objects, events, or outcomes, the employee will use deductive reasoning to determine a logical conclusion and to recognize assumptions and will use inductive reasoning to make appropriate generalizations. The employee will also use deductive and inductive reasoning to interpret sentences that include the connectives "and," "or," and "if-then," as well as the quantifiers "some," "all," and "none."

Supporting Objectives

The employee will

15.01 correctly interpret verbal expressions containing quantitative information that includes connectives such as "and," "or," and "if- then."
15.02 correctly identify the generalization of a statement containing quantitative information that includes quantifiers such as "some," "all," or "none."
15.03 determine a logical conclusion based on a set of three statements, each of which contains quantitative information.
15.04 determine whether a stated conclusion is valid or invalid.
15.05 identify the manipulative effect of numbers and quantifiers in advertisements, political slogans, or other similar texts.
15.06 make an appropriate generalization and identify at least one counter-example.

Content Limits

1. All information required to solve a problem will be contained in the stem.
2. Conclusions required for a correct solution will not conflict with common knowledge or scientific facts.
3. Problems addressing assumptions will clearly indicate that an assumption must be made.
4. A maximum of five possible outcomes for the conditional statements may be presented in the stem.

Proficiency 16

Given a set of data, a graph, or a schematic diagram, the employee will choose an appropriate graph for the data or read and interpret the graph or diagram.

Supporting Objectives

The employee will

16.01 identify the properties or parts of a specific kind of graph or chart.
16.02 determine the value of multiple symbols or parts of symbols when given the value of one symbol.

16.03 partition a circle into parts when given common parts in fraction or percent form.
16.04 identify graphs or charts with distorted axes and specify consequences of drawing conclusions without adjusting for the distortion.
16.05 make visual comparisons between the parts of a circle graph and the lengths of bars in a bar graph or size of symbols in a picture graph.
16.06 choose an appropriate graph to accurately and appropriately represent a given set of data.
16.07 read and interpret bar, line, circle, and picture graphs containing five to ten categories.
16.08 trace the flow or sequence of events through a schematic diagram from a specified beginning to a specified ending.
16.09 read and interpret schematic diagrams, such as flowcharts, electrical wiring diagrams, and scale drawings, containing at least four but not more than eight elements.

Content Limits

1. All data presented graphically will be presented in two dimensions.
2. All data will be presented in whole or half units.
3. Interpolation between points on a scale or interpretation of fractional parts of graphic symbols will be limited to units of one-half, one-fourth, or three-fourths.
4. Axes on graphic material will be labeled with whole numbers.
5. Graphic material may contain negative numbers on one axis only.
6. Problems requiring the interpretation of a scale drawing will contain both a line and a number to indicate the scale size.
7. All information required in reading and interpreting a schematic diagram will be presented with the problem.
8. Computations required to solve a problem will be limited to addition, subtraction, multiplication, or division of whole numbers.
9. Calculation for any one problem will require no more than two different number operations.
10. Units expressed as multiples of 1,000 or 1,000,000 will be described in words and not symbols and will contain no more than one decimal place (e.g., 1.5 million).

READING TEST

Item Specifications

A. GENERAL SPECIFICATIONS

The Reading Test measures a variety of skills that contribute to the ability to comprehend, analyze, evaluate, and use written material. It consists of passages of varying types, lengths, and levels of difficulty. Each passage is followed by multiple choice questions that measure the employee's understanding of its content.

Reading Passages

1. Passages will reflect the types of reading material, both general and professional, to which teachers and other professionals in education normally are exposed.

   a. The content of 60-75% of the passages will be related to education; 25-40% will contain material of more general interest.
   b. At least one passage in each test will be technical or scientific in content.
   c. Each test will contain at least one passage related to minority issues and one to issues of concern to women.
   d. The passages will represent different types of prose style; e.g., expository, descriptive, and narrative.
   e. The passages will not contain any evidence of racial, ethnic, or sexual bias.
   f. The passages and questions will neither require previous knowledge of the subject matter in order to comprehend what is read nor give an advantage to those who may have such prior knowledge.
   g. Passages will be of three different lengths: long (approximately 200 words), medium (approximately 100 words), and short (50 words or fewer).

2. The passages may vary in level of difficulty but will reflect the range generally appropriate for average, educated adults. At least one passage will be explicit or readily understandable; other passages will be more complex.

Content Limits for All Items

1. The items following any one passage may measure any combination of the reading proficiencies or supporting objectives.

2. The items following a passage may vary in difficulty.

3. The proficiencies and supporting objectives sampled will measure reading skills requiring various cognitive functions.

   a. Literal Comprehension—the ability to recall factual material and to grasp its literal meaning.

   b. Application and Analysis—the ability to apply material to new and to practical situations, as well as to break it down into component parts so that its organizational structure is understood.

c. Synthesis and Evaluation—the ability to use given material to form new concepts and to judge the value of material for a given purpose.

4. The items will sample both discrete and integrative understanding of various units within the passage; i.e., words, phrases or clauses, sentences, paragraphs, or the entire passage.

Distractor Limits for All Items

1. There will be only one correct answer to each question; all four distractors must be clearly incorrect.
2. "All of these" and "none of these" will not be used as answer choices.
3. All distractors will be plausible and related in some way to the content of the passage or the question.
4. Distractors will consist of common errors, such as incorrect statements of information or implications in the passage, correct statements of information that is not included in the passage, faulty interpretations, misapplications of given information, etc.
5. Distractors will be congruent with the item stem and with each other in grammar, level of terminology, and level of abstraction.
6. No "trick" questions will be asked; distractors will not depend on details that are irrelevant to the question, such as incorrect spelling or "trick" wording; e.g., homophones.

B. ITEM SPECIFICATIONS FOR READING PROFICIENCIES

Proficiency 21

Given a passage to read, the employee will correctly answer questions requiring the ability to identify (a) the main idea, (b) the supporting details, (c) the meaning of particular words or phrases from context, and (d) the best paraphrase or summary of the passage or a section of the passage.

Supporting Objectives

The employee will

21.01 identify the stated or implied main idea of a passage.
21.02 identify key details that support the main idea of a passage or of a paragraph in the passage.
21.03 use context as a clue to meaning.
21.04 demonstrate literal comprehension of a passage by choosing the correct paraphrase or summary of the passage or a section of it.

Content Limits

1. Passages will be informative, with one clearly presented idea that is either explicitly stated or clearly implied. Every test will include one passage with an explicitly stated main idea and one passage with an implied main idea.
2. Passages will include at least two supporting details for the main idea.
3. For objective 21.01, item stems will ask the employee either to (a) identify the main idea of the passage, (b) select the best title for the passage, or (c) select a question answered by the main idea of the passage.

4. For objective 21.02, item stems will ask the employee either to (a) identify the details that support the main idea of the passage or a paragraph in the passage or (b) answer a question requiring comprehension of an explicit supporting detail.
5. For objective 21.03, item stems will ask the employee to select the correct meaning of a given word or phrase in the context of the passage.
6. For objective 21.04, item stems will ask the employee to select the best paraphrase or summary of the passage or a section of the passage.

Proficiency 22

The employee will demonstrate understanding of stated and underlying relationships between elements in a passage by recognizing (a) the sequential order of elements in the passage, (b) patterns of cause and effect, and (c) other organizational principles, such as chronological order, comparison and contrast, or organization by examples.

Supporting Objectives

The employee will

22.01 determine the sequence of events or steps in a process.
22.02 perceive cause-effect relationships.
22.03 analyze the parts of a passage in order to recognize the organizational principles involved: chronological order, comparison and contrast, organization by examples, spatial order, general to specific, analogy, cause-effect.

Content Limits

1. Passages used for objective 22.01 will contain a description of at least two events or steps in which the sequential order is clear.
2. Passages used for objective 22.02 will contain at least one element with a clearly stated cause or effect.
3. Passages used for objective 22.03 will be clearly organized according to **one** of the organizational principles listed in the objective.
4. For objective 22.01, item stems will ask the employee to select a statement that answers a question about the chronology of events in the passage.
5. For objective 22.02, item stems will ask the employee to select the cause or the effect of a particular element in the passage.
6. For objective 22.03, item stems will ask the employee to identify the organizational principle of the passage.

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Proficiency 23

After reading a passage, the employee will identify the writer's (a) purpose, (b) attitude or tone, (c) assumptions about the subject, and (d) implications about the subject. The employee will also answer questions that require understanding of (e) fact versus opinion, (f) the author's use of language, and (g) emotional or manipulative devices used.

Supporting Objectives

The employee will

23.01 recognize the author's purpose.
23.02 identify the author's attitude or tone.
23.03 identify the assumptions the author has made.
23.04 recognize implications made by the author and make inferences based on stated or implied information.
23.05 distinguish between fact and opinion.
23.06 recognize the effect of the author's choice of a particular word or words.
23.07 identify emotional and other manipulative devices used by the author.

Content Limits

1. For objective 23.01, item stems will ask the employee to select the author's primary purpose.
2. For objective 23.02, item stems will ask the employee to select the response that best describes the author's attitude.
3. For objective 23.03, item stems will ask the employee to select the response that best describes an assumption the author has made regarding either a section of the passage or the passage as a whole.
4. For objective 23.04, item stems will ask the employee to select the response that is an accurate inference from the passage or a part of the passage.
5. For objective 23.05, item stems will ask the employee to select the quotation from the passage that is a fact rather than an opinion or to select the statement that is an opinion.
6. For objective 23.06, item stems will ask the employee to select the response that best describes the effect of the author's word choice in the passage.
7. For objective 23.07, item stems will ask the employee (a) to select the excerpt that is an example of the author's use of manipulative or emotional devices or (b) to select a description of a device used to sway the reader.

Proficiency 24

Given an informative passage to read, the employee will (a) apply elements of the message to a practical situation and (b) make judgments about the relation of the message to a particular audience or to the body of general knowledge about the topic.

Supporting Objectives

The employee will

24.01 use rules, methods, concepts, principles, laws, or theories in new and concrete situations.
24.02 judge the value of material for a given purpose.

Content Limits

1. For objective 24.01, item stems will ask the employee to select the response that expresses the logical application of the message to a practical situation.
2. For objective 24.02, item stems will ask the employee to (a) select the audience for which the passage is most appropriate or (b) select the description of the type of publication in which such a passage might be found.

Proficiency 25

The employee will, after reading a persuasive passage, evaluate the (a) strengths and/or weaknesses of the argument and (b) the relevance and/or appropriateness of supporting evidence.

Supporting Objectives

The employee will

25.01 judge the value (strengths and weaknesses) of an argument.
25.02 evaluate the relevance of a particular supporting fact or example to the argument.

Content Limits

1. For objective 25.01, item stems will ask the employee to select the response that accurately describes the main strength or weakness of an argument.
2. For objective 25.02, item stems will ask the employee to select the response that is the most relevant/appropriate support for a given argument.

WRITING TEST

Item Specifications

Proficiency 31

Given a sentence, the employee will decide whether any of the underlined parts contains a grammatical error, a word use error, or a punctuation/capitalization error.

Supporting Objectives

ne employee will recognize errors in the use of

31.01 nominals.
31.02 verb tense.
31.03 verb number.
31.04 verb mood.
31.05 pronoun reference.
31.06 pronoun case.
31.07 pronoun number.
31.08 adjectives and adverbs.
31.09 coordination.
31.10 subordination.
31.11 negation.
31.12 diction.
31.13 idiomatic prepositions.
31.14 punctuation.
31.15 capitalization.

The employee will recognize

31.16 sentence fragments.
31.17 comma splices.
31.18 fused (run-on) sentences.

Content Limits

1. The items will be composed in standard written English prose except for those errors intentionally introduced.
2. The prose style of the items will have those characteristics defined by the Supporting Objectives for Proficiency 32. The prose style will be direct and economical except when errors are intentionally introduced.
3. No item will contain more than one intentional error—a grammatical error, a word use error, or a punctuation/capitalization error that is inappropriate to standard written English.
4. Two to three items will be keyed "no error."
5. Instances of intentional errors must be of a relatively common nature. Test items will not rely on "exceptions to the rule" to introduce intentional errors.

Proficiency 32

Given a sentence and a set of possible substitutions for that sentence or a specified part of that sentence, the employee will decide which alternative is the most **effective,** as well as correct, expression in standard written English.

Supporting Objectives

The employee will recognize an effective prose style as one that

32.01 avoids unnecessary abstract nouns.
32.02 avoids unnecessary or inappropriate use of "to be" predication.
32.03 avoids unnecessary or inappropriate use of passive voice predication.
32.04 avoids unnecessary or awkward repetition.
32.05 avoids unnecessary, inappropriate, or excessive use of subordinate clauses by employing verbals, verbal phrases, and other appropriate means of reduction.
32.06 avoids cliches.
32.07 avoids unnecessary, inappropriate, or excessive coordination by employing subordinate constructions.
32.08 restricts the use of consecutive prepositional phrases.
32.09 is free of agreement problems.
32.10 is free of pronoun usage errors.
32.11 is free of verb usage errors.
32.12 is free of faulty parallel structures.
32.13 is free of dangling or misplaced modifiers.
32.14 is free of punctuation errors.

Content Limits

1. The items will be composed in standard written English except for those errors intentionally introduced.
2. The items will have the characteristics of an effective prose style as defined by the Supporting Objectives for Proficiency 32. The prose style will be direct and economical except when interrupted by intentionally introduced errors or other departures from an effective prose style
3. An error is defined as a grammatical error, a word use error, or a punctuation/capitalization error that is inappropriate to standard written English.
4. A departure from an effective prose style is defined as a failure to observe the specific characteristics that are listed as Supporting Objectives for Proficiency 32.
5. Two to three items on each test will not need correction.
6. Instances of intentional errors or departures from an effective prose style must be of a relatively common nature. Test items will not rely on "exceptions to the rule" to introduce intentional problems.
7. Ten of the twenty certified items on each test form must address Supporting Objectives 32.09 through 32.14.

Proficiency 33

The employee will plan and write an expository or argumentative essay on a specified topic

Supporting Objectives

The employee will

33.01 provide a thesis.
33.02 sustain a focus on the thesis.
33.03 attain the purpose of an expository or argumentative essay.
33.04 select a persona or voice appropriate to both the audience and the purpose of the essay
33.05 shape the essay to address a specific audience.
33.06 use specific detail to explain, illustrate, and support the general conclusion (thesis).
33.07 use a consistent mode of organization.
33.08 employ adequate and appropriate sentence pattern variety.
33.09 employ precise and appropriate vocabulary.
33.10 construct sentences in standard written English.
33.11 construct adequately developed and well-organized paragraphs.
33.12 construct effective transitions in and between paragraphs.
33.13 employ an effective prose style that is both direct and economical.

Content Limits

1. Topic questions will be designed to provoke an expository or argumentative essay.
2. Topic questions will be sufficiently limited in scope to allow an adequate discussion.
3. Topic questions will address the concerns and interests of a professional educator.
4. Topic questions will focus on the personal experience of the employee.
5. Topic questions will be content free: they will not require any specific body of knowledge.

BEST COPY AVAILABLE APPENDIX B

FUNCTIONAL ACADEMIC SKILLS TESTS – SCORE REPORT

1E: HOME ADDRESS: ID NO:

. SEC. NO.: TEST LOCATION: RYAN E TEST DATE: 06/84

OVERALL PERFORMANCE	READING	MATHEMATICS	WRITING
PASSING SCALED SCORE	177	179	172
YOUR SCALED SCORE	176	170	174
YOUR STATUS	FAIL	FAIL	PASS

–PROFICIENCY PROFILE

	PROFICIENCY	TOTAL ITEMS POSSIBLE	NUMBER OF ITEMS CORRECT	PERCENT CORRECT 1. YOUR SCORE 2. AVERAGE (TOTAL GROUP) 3. AVERAGE (ALL PASSING)	PERCENT CORRECT –PROFILE– 0 10 20 30 40 50 60 70 80 90 / 5 15 25 35 45 55 65 75 85 95
	READING				
	main idea, supportive details, meaning of word or phrase	8	2	25 74 82	XXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
	sequence of events, cause-effect, organizational principals	6	4	67 76 84	XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXX
	author attitude, purpose, implications, use of language	11	10	91 71 79	XXXXXXXXXXXXXXXXX XXXXXXXXXXXXX XXXXXXXXXXXXXXXX
	application and appropriateness for particular purpose	3	2	67 74 79	XXXXXXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXX
	evaluation of reliance and strength of argument	3	1	33 64 67	XXXXXXXX XXXXXXXXXXXXX XXXXXXXXXXXXX
	MATHEMATICS				
	comparing rational numbers, powers of ten, computation estimates	11	5	45 72 86	XXXXXXXXX XXXXXXXXXXXXX XXXXXXXXXXXXXXXXX
	identifying and solving life problems	10	5	50 71 85	XXXXXXXXXX XXXXXXXXXXXXX XXXXXXXXXXXXXXXXX
	solving problems with data sets and describing geometric configurations	7	3	43 76 88	XXXXXXXXX XXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXX
	solving a measurement problem	4	2	50 69 82	XXXXXXXXXX XXXXXXXXXXXX XXXXXXXXXXXXXXX
	solving a logic problem and identifying assumptions	3	1	33 75 85	XXXXXXXX XXXXXXXXXXXXXX XXXXXXXXXXXXXXXXX
	interpreting graphs and diagrams	5	3	60 74 85	XXXXXXXXXXXX XXXXXXXXXXXXXX XXXXXXXXXXXXXXXXX
	WRITING				
1	recognizing grammatical errors	25	19	76 69 76	XXXXXXXXXXXXXXX XXXXXXXXXXXXX XXXXXXXXXXXXXXX
2	judging effective sentences	20	13	65 69 75	XXXXXXXXXXXXX XXXXXXXXXXXXX XXXXXXXXXXXXXXX
3	essay composition	12	6	50	XXXXXXXXXX